Title (en)

Threading/tapping control apparatus

Title (de)

Steuervorrichtung zum Gewindeschneiden/Gewindebohren

Title (fr)

Appareil de contrôle de filetage/taraudage

Publication

EP 1566713 A2 20050824 (EN)

Application

EP 05001354 A 20050124

Priority

JP 2004023993 A 20040130

Abstract (en)

A workpiece (16) is rotated by a master motor (5m) and a tool (8) is linearly moved by a slave motor (5s) to cut a thread in the workpiece. Position feedback of the master motor is multiplied by a coefficient K and the result used as the position command of the slave motor (Pcs). Provision is made of an angle synchronization learning control unit (11) for storing one pattern cycle's worth of the correction data (´) of the threading and adding the same to the position deviation (μ). This control unit stores one pattern cycle's worth of the correction data corresponding to the position feedback of the master motor. The position is converted to the correction data corresponding to the time at that time based on the stored correction data to find the correction data and this is added to the position deviation.

IPC 1-7

G05B 19/18

IPC 8 full level

B23Q 15/00 (2006.01); **G05B 19/18** (2006.01); **B23G 1/16** (2006.01); **G05B 19/19** (2006.01)

CPC (source: EP US)

G05B 19/186 (2013.01 - EP US); **G05B 19/19** (2013.01 - EP US); G05B 2219/41177 (2013.01 - EP US); G05B 2219/41207 (2013.01 - EP US); G05B 2219/42129 (2013.01 - EP US); G05B 2219/45214 (2013.01 - EP US); G05B 2219/45216 (2013.01 - EP US)

Cited by

EP1967924A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1566713 A2 20050824; **EP 1566713 A3 20071226**; CN 1647881 A 20050803; JP 2005216135 A 20050811; US 2005168178 A1 20050804; US 7215089 B2 20070508

DOCDB simple family (application)

EP 05001354 A 20050124; CN 200510005124 A 20050128; JP 2004023993 A 20040130; US 4316305 A 20050127